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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/857,416	06/04/2001	Curt Zimmermann	2001-0662A	3348
513	7590	06/14/2005	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P. 2033 K STREET N. W. SUITE 800 WASHINGTON, DC 20006-1021			LEWIS, PATRICK T	
			ART UNIT	PAPER NUMBER
			1623	

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/857,416	ZIMMERMANN ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Patrick T. Lewis	1623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/EP99/09517, filed on December 6, 1999.

### ***Applicant's Response Dated March 28, 2005***

2. In the Response filed March 28, 2005, claim 1 was amended. Claims 1-9 are pending. An action on the merits of claims 1-9 is contained herein below.

3. Applicant's arguments in regards to Priority have been fully considered and are persuasive.

4. Applicant's arguments filed March 28, 2005 in regards to the rejection of claims 1-9 under 35 U.S.C. 112, second paragraph, have been fully considered but they are not persuasive.

5. The rejection of claims 1-9 under 35 U.S.C. 103(a) as being unpatentable over Krasik Tetrahedron Letters (1998), Vol. 39, pages 4223-4226 (Krasik) in combination with Algieri et al. US 4,927,968 (Algieri) and Schaefer et al. US 5,380,794 (Schaefer) is maintained for the reasons of record set forth in the Office Action dated October 6, 2004.

***Rejections of Record Set Forth in the Office Action Dated October 6, 2004***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Applicant's arguments filed March 28, 2005 have been fully considered but they are not persuasive. Applicant argues that even though step a) does not result in the formation of an acetal, the starting product already has one acetal group. The examiner respectfully disagrees with applicant's assertion. The terms "acetal" and "hemiacetal" are recognized in the art as not being equivalent. Applicant shows the structure for a generic hemiacetal of page 5 of REMARKS; however, contrary to applicant's assertion, the structure does not show an "acetal". An acetal is a functional group or molecule containing the functional group of a carbon bonded to two -OR groups wherein R is an alkyl (see Schaefer, column 2). The term "acetal" and the moiety "-OR" would not have been recognized by one of ordinary skill in the art at the time of the invention as having the same meaning. The moiety "-OR" is generally referred to in the art as an "alkoxy" or "O-alkyl" not an "acetal". Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so

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redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999).

As recognized by applicant, step a) does not result in the formation of an acetal; thus, it is unclear what acetal is cleaved following step a), and thus, claims 1-9 are indefinite.

8. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Krasik *Tetrahedron Letters* (1998), Vol. 39, pages 4223-4226 (Krasik) in combination with Algieri et al. US 4,927,968 (Algieri) and Schaefer et al. US 5,380,794 (Schaefer).

Applicant's arguments filed March 28, 2005 have been fully considered but they are not persuasive. Applicant argues that: 1) "the starting material as well as the desired end product is unobviously different from D1" and 2) there is no description or suggestion in D1 that using glyoxylic ester hemiacetal as a starting material would lead to the desired products in much higher yields and in a cheaper and easier way than described in D1 (D1 = Krasik).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The examiner agrees that there is no obvious difference in choice of starting materials employed in the instant method compared to Krasik. It would have been obvious to one of ordinary skill in the art at the time of the invention to prepare glyoxylic esters by first converting a glyoxylic ester hemiacetal into the corresponding glyoxylic

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ester acetal and then transesterifying it with an alcohol in the presence of a catalyst. Krasik teaches all of the required steps with the exception of the use of hemiacetal as a starting material; however, one of ordinary skill in the art at the time of the invention would readily recognize hemiacetals as being intermediates in the formation of acetals from aldehydes. It was well known in the art that hemiacetals, used to protect aldehyde moieties, are unstable and are usually further converted into the more stable corresponding acetal prior to transesterification. 35 U.S.C. 103(a) does not require that the prior art teach the desired products in higher yields or in a cheaper manner. Once the general reaction has been shown to be old, the burden is on the applicant to present reason or authority for believing that a group on the starting compound would take part in or affect the basic reaction and thus alter the nature of the product or the operability of the process and thus the unobviousness of the method of producing it.

### ***Conclusion***

9. Claims 1-9 are pending. Claims 1-9 are rejected. No claims are allowed.
10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### ***Contacts***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick T. Lewis whose telephone number is 571-272-0655. The examiner can normally be reached on Monday - Friday 10 am to 3 pm (Maxi Flex).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Patrick T. Lewis, PhD  
Examiner  
Art Unit 1623

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